# CENTRAL INTELLIGENCE AGENCY

## INFORMATION REPORT

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## INTRODUCTION

- Design Bureau No. 3 was organized when the seventeen deported German specialists arrived in Krasnoarmeyskiy during November 1946. The buildings which housed the Design Bureau had been used during the war as an explosive filling plant for amunition. The equipment of the plant probably consisted of little more than a few standard conveyor belts. Although I do not know any details, I believe that this filling plant was at that time part of the S.N.I.P. firing range . Immediately after the war there was a considerable decline in activity on the S.N.I.P firing range which apparently resulted in the closing of the explosive filling plant. The dilapidated condition of the Muildings indicated that they had not been in use from 1945 until our arrival in November 1946.
- 2. Within a few days after our arrival we began with our development work at the site of the former filling plant. In the following, year the personnel of KB No. 3 increased and gradually we began to make use of the whole complex shown on the attached sketch /see page 12/. Also during the first year an experimental workshop was organized and outfitted in one of the former buildings of the filling plants.

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- there was much space and few employees. During this period Soviets and German engineers were interspensed and often emend the same offices. The German personnel had access to every lift of the installation. By 1948, however, a high wooden fence had been constructed to isolate the Germans from the Soviets. Thereafter the movement of the German specialists was restricted to one small section of the main building and only on rare occasions were we permitted to enter the Soviet occupied part of EB No. 3, and then only under strict supervision.
- 4. The iron curtain was applicable to the whole complex and thus included the experimental worksheps to which the Garman specialists had had free access prior to 1948. The only place to which both the Germans and Soviets had access after 1948 was the firing range of KB No. 3. This range had been constructed during 1947 to obviate the need for recourse to the S.M.I.P. firing range. However, while the Germans made use of this range until 1950, we were never present during the testing of Soviet designed projects. Thus the segregation and isolation of the Germans was in effect applied to the range as well, although we had physical access to the range.

## PHYSICAL DESCRIPTION OF DESIGN BUREAU BO. 3

it is difficult for me to designate the use of the various parts of the Design Bureau with any precision. In identifying the various points I have therefore given the use prior to 1948 and the probable use after that date. These latter suppositions are based in part on inferences which I am not able to reconstruct, or they are the result of observations which I made on those isolated occasions when I passed through the Soviet part of KB No. 3 on visits to the chief.

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#### Point A Guard Building

Green colored weeden building, 7 x 8 m. The following parts of this building have been identified:

- 1. Entrance to Design Bureau Ho. 3
- 2. Reception Room
- 3. Guard Room
- 4. Guard Room

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## Point B Wooden Fence

2345

3-m, high board fence constructed during 1947. From 1948 until June 1952 this fence segregated the Soviets from the German element in the Design Bureau. Within the main building this segregation was assured by means of the steel door Point 8 under Point I

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#### Point C Transformer Station

The transformer station was constructed during 1947. It contained two transformers of unknown capacity. The station supplied the Design Bureau with 380 volts.

## Point D Single, Small-Gauge Railroad Tracks

The small-gauge railroad line passes through the city of Krasnoarmeyskiy and Putilovo ending in Sofrino. Here occurs the change from the small to the standard gauge tracks.

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#### Point E Wooden Gate

Wooden gate in the 3-m, high board fence (point B) across the small-gauge railroad tracks.

## Point F Barbed Wire Gate

The gate is used to permit the entry and exit of  $_{100,000}$  train traffic.

## Point G Wooden Steps

## Point H Footwalk

#### Point I Main Building of Design Bureau No. 3

Single story, H-shaped, stucco finished brick building with a simple gable roof of smooth tin plates. The dimensions of the building are shown in the sketch. A frontal view showing pertinent details of facade and roof is supplied in the upper right corner of the sketch. The ventilation in this building as in all other buildings of KB No. 3 was extremely poor. The building was sufficiently heated throughout the winter months, but except for the larger offices no flue ventilators were provided. As an added measure against the cold, the windows of the building were sealed with putty and paper. All these measures did hot permit the

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diring of the rooms and resulted in a lack of ventilation. In this building the offices of the German specialists and Soviet employees of the KB No. 3 were located. The personnel of the offices changed several times during the period 1946 to 1952, especially during 1948 when the German engineers were segregated from the remainder of the KB No. 3 personnel. The following is a floor plan of the main building:

#### 1. Entrance

Used by German personnel after the division in 1948. Soviet personnel entered the main building through various entrances leading from the courtyard (Point I/39).

- 2. Office of Dr. TROMMSDORF after 1948 -
- 3. Office of designers attached to my group after 1948
- 4. Office of TAEUBERT and BACHMANN 1948

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- 5. Office of the entire SCHAADT-BOEHM Group after 1948
- 6. Washroom
- 7. Washroom
- 8. Steel Door

Constructed during 1948. This door was locked and constitutes part of the fencing system which separated the Germans from the Soviet element. Except for members of the First Section, no German or Soviet could use this door.

- 9. Office of the Secretary to the Chief
- 10. Corridor
- 11. Office of the First Section after 1948
- 12. Exit

This exit was usually barred. Along the walls of the corridor leading to this exit electrical switch boxes were mounted.

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- 13. Reception Room of Chief after 1948
- 14. Office of the Chief Engineer, ULYANOV, after 1948
- 15. Office of the Chief. DAVISHEV, after 1948
- 16. Office (Unidentified)
- 17. Office occupied until the middle of 1947 by KUKUSHKINA, secretary to the first chief of KB No. 3, RYATIPOV
- 18. Recreation Room for Soviet personnel
- 19. Library

Containing both technical material and nontechnical literature.

20. Office of Department No. 4 headed by DEVYLTKOV after 1948

Prior to 1948 this office was occupied by TROMMSDORF and also served as a conference room.

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- 22. Office of SUDAKOV after 1948
- 23. Shatter Proof Niche

Prior to 1948 used by Department No. 4 and the German specialist BACHMANN. After 1948 this niche and the other listed below were used by Soviet female calculators

24. Shatter Proof Niche

1bid.

25. Shatter Proof Niche

1514.

26. Offices of a Soviet designing section after 1948

Prior to 1948 the Soviet and German members

| used this office. The Soviet members
| continued to occupy this office after the segregation of the two nationalities.

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- 27. Office of the Soviet Drafting and Drawing Section after 1948
- 28. Offices of a Soviet designing section after 1948

Prior to 1948 this office was used by the SCHAADT Group and their Soviet assistants. It is probable that the Soviets formerly assigned to the SCHAADT Group and who were organised now as an independent Soviet designing section continued to becaupy this office.

29. Unidentified office

Prior to 1948 this office was used by SCHAADT and the Soviet co-supervisor of the SCHAADT Group.

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30. Unidentified office

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This office was occupied for a short period towards the end of 1946 by my the SCHAADT Group. Later this office was used by an unidentified Soviet section.

- 31. Office of the Supply Clerk after 1948 :
- 32. Office of the Reproduction Section after 1948
- 33. Photographic Laboratory
- 34. Washroom
- 35. Washroom
- 36. Industrial Materiel Procurement Office
- 37. Vestibule

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38. Main Entrance to Design Bureau No. 3

This entrance was used jointly by Soviet and German personnel of KB No. 3-prior-to-1946.

After that year this entrance was used only by Soviet personnel.

- 39: Courtward and Garden
- 40. Office of the Administration
- 41. Office of the Administration

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- 42. Chemical Laboratory of KB No. 3
- 43. Laboratory

Calorimetric bomb was stored here.

44. Laboratory (physical) of KB No. 3

Bending presses and tensile test machines located here.

45. Electrical Laboratory of KB No. 3

Oscillographs were stored here.

## Point K Experimental Workshops

- 1. Steps leading down to entrance
- 2. Entrance and hall-way
- 3. Unidentified offices

These offices were used by Soviet clerical personnel assigned to the experimental workshops. The number of offices shown on the sketch may not be correct.

- 4. Office of the Chief of the Workshops
- 5. Workshops
- 6. Assembly Area

Equipped with two cast iron mounting blocks.

7. Storage Room

Used for non-ferrous material primarily bronse.

- 8. Tool Storage and Issue Room
- 9. Finished parts storage

a garage and

Here parts such as fuzes which were obtained outside of the Design Bureau No. 3 are stored.

10. Office of the Inspection Section O.T.K.

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## Point L Storage Shed

Point O

A brown-colored wooden but, 35 x 6 m. and with a height of 4 m. The side of the but which faced the main building of KB No. 3 was not enclosed.

## Point M Storage Building

Rectangular, brown-colored wooden hut, 40 x 8 m. with a height of 6 m. This storage hut was always kept carefully closed and I never entered it during my stay at KB No. 3. From hearsay information I know that the finished "Molnya" and "ABRS 220" missiles were stored here, but I do not know how many. Furthermore I noticed once a truck delivering gyroscopic equipment such as used on the German wartime missile "Fritz X" to this building. I do not remember in what year this event took place.

## Point N Central Heating Plant Serving KB No. 3

#### Point O Projected Conveyor System

During 1950 charged by the Chief or some other Soviet official of KB No. 3 with the rough design of a transport system that was to connect the storage building (Point M) with the experimental workshops (Point K). I do not remember the exact point at which the conveyor was to enter the experimental workshop, but I do know that the conveyor was to pass along the 16-m. base of the L-shaped experimental workshop. The proposal submitted called for a single rail consisting of 300mm, to 400mm, double T steel bars which was to be suspended over the ground. The rail was to be supported by steel latticed frames, shaped in a manner as shown on the detail see page 12 which were to be placed at regular intervals. The rail was to run along the street which passes behind the building (Point M) and then over the street which runs along the base of the L-shaped building. The support which was to be located along this base (possibly more than one) was to be arch-shaped /see page 12 /. This was required as this support would extend over the street and consequently had to be high enough to allow for passing truck traffic. The other supports which did not extend over the street (they ran along the street) were only to be 4.5 m, high and therefore could be of weaker construction. Along the steel track a suspended hook assembly had a capacity of 1.5 tons. The hook was adjustable to a maximum height of 3.5 meters. The proposed conveyor system; which obviously was meant to facilitate the transport of 50X1-HUM

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steel beams stored in the building (M) to the workshops (K), was never constructed while we were in KB No. 3, but shortly before our departure in June 1952 steps which seemed to indicate that construction was about to begin were taken.

## SECURITY MEASURES AT KB NO. 3

6. The security of the installation was the responsibility of the Pirst Section of KB No. 3 which in turn was responsible to the local office of the MVD

The system of passes used 50X1-HUM

at KB No. 3 has also been discussed

Concerning the physical security aspects I therefore need only
add the following. A barbed wire fence enclosed the whole complex, as shown on the attached sketch see page 12. The fence
was patrolled by Soviet military personnel station in the local caserne
approximately fifteen soldiers were on duty at the Design Bureau;
five in the guard building Point A and the rest patrolling
within the fenced enclosure.

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- 7. During the last year \_\_\_\_\_\_\_\_ in Krasnoarmeyskiy, an electrical warning system was constructed around the Design Bureau No. 3. This system was to permit the guards patrolling along the fence to alarm the guard building from various strategically placed phone boxes along the fence.
- 8. A common security feature throughout the Soviet Union is the use of floodlights. Even small and non-critical establishments are provided with searchlights which illuminate the establishment during the night. Similar floodlights were provided around the Design Bureau, and the principal aim is the prevention of theft. The searchlights used there were approximately twice the size of average automobile headlights, cylindrical in form and had an effective range of up to 200 meters. They were mounted at a height of approximately 6 m, with an angle of 10-15 degrees.

## EQUIPMENT AT DESIGN BUREAU

## Shortage of Equipment at KB No.3

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equipment whatsoever at the installation. Of course little was required for the designers except drawing tables and paper but there was even a shortage of the latter at times. Gradually tools and machinery arrived to equip the newly organized experimental workshops which were ready for operation by the middle of 1947.

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10. This equipment was chiefly of Soviet manufacture with a few dismantled machines from Germany. Several of the latter machines were of origin.

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In Small rooms referred to as "laboratories" were furnished during the first year too. The last to be installed was the electro-technical laboratory concerning whose establishment a considerable controversy took place. In the spring of 1947 the Soviets pressed to continue work on the controlled inssile "Falke" which had been started in Berlin during 1946.

| objected very strongly to assuming responsibility for this project until the required facilities, above all, until an electro-technical laboratory had been made available. Thereupon the Soviets dropped the project, and promised to make such a laboratory available. A primitively equipped laboratory was finally installed during 1948 or 1949; too late however to be of use for the "Falke" or as the Soviets had now named to the "Sokol" project which was finally started by my

Designing Offices

12. These offices were equipped with "Kuhlmann" drafting tables which had been manufactured in the Soviet Union and were poor imitations of the German prototype.

group during the beginning of 1948.

13. A German made electric calculating machine powered by a simple motor and many small hand operated machines were available but no electronic calculating equipment.

#### Experimental Workshops

19.

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- 14. The workshops see point K/5 on page 7 were equipped with machines whose positions are identified on the sketch by the following letters:
  - a. Lathes: Approximately six to eight lathes with the following average dimensions height of centers: 200 mm; length between centers: 1.5 to 2 m. .1
  - b. Radial bore machines: One had a diameter of 40 to 50 mm. and the second one had a diameter bore of 18 mm. maximum.
  - c. Horizontal bore machines: Table plate, 1.5 m. square and was of German "Union" make.
  - d. A traveling crane with trolley gear and electric drive: This ran lengthwise along the workshops and had a capacity of 1,000 to 1,500 kg.
  - e. Numerous minor wokshop machines. The assembly area was equipped with two cast iron mounting plates.
  - f. The "Beche hammer," a preumatic hammer. Trimming presses and profile cutters were also available. This was the heaviest equipment at KB No.3. I do not know where this equipment was placed.

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## Laboratories

- 15. The Chemical or Powder Laboratory /see Point 1/42 and 1/43 on page 7 / contained in addition to the usual equipment a calorimetric bomb for heat tests on powders.
- 16. The Physical Laboratory contained: \_see Point 1/44 on page 7\_7.
  - a. Tensile test machines for steel strenght tests. Capacity 10 mm. diameter.
  - b. Impact-bending test machines with a capacity of up to 2.5 cm. x 8 mm.
  - c. Press for initial pre-bulging of copper compression cylinders used in testing the gas pressure.
- 17. The Electro -Technical Laboratory /see Point 1/45 page 7. J. contained:
  - a. Complete "Askania" cine-theodolite station. I think that this station was here and belonged to the S.N.I.P. range. No use was made of the "Askania" station because of the lack of trained personnel to service the theodolite.
  - . b. A two or three-trace oscillograph was reportedly available.
  - c. A large number of cathode-ray oscillographs. These were simple units consisting essentially only of a Braunian tube which recorded still-film pictures by means of an oscillator. They were constructed of little cardboard boxes produced in CEMA, Berlin during the postwar period.
- 18. Except for additional minor equipment this constituted the 50X1-HUM equipment of this laboratory. requested that a 500 Hertz converter for the testing of gyroscopic equipment be installed, but I do not know whether this converter ever arrived. I think that the laboratory was served with 380 v AC as well as DC voltages of 6, 12, 24 and 48.

## Possible Explanation for Equipment Shortage

19. Linear, angular, time and mass force and pressure measurements were of the standard type used in small industrial concerns.

No unusual or novel instruments were available. One reason for the shortage of equipment, especially the electro instruments, was that controlled missiles were not worked on by the Design Bureau No. 30

